WHAT IS CLAIMED IS:

1. An isolated polynucleotide from coryneform bacteria, containing a polynucleotide sequence, selected from the group comprising

a) polynucleotide which is at least 70 % identical to a polynucleotide coding for a polypeptide which contains the amino acid sequence of SEQ ID no. 2,

b) polynucleotide which codes for a polypeptide containing an amino acid sequence which is at least 70 % identical to the amino acid sequence of SEQ ID no.2,

c) polynucleotide which is complementary to the polynucleotides of a) or b), and

d) polynucleotide containing at least 15 successive nucleotides of the polynucleotide sequence of a), b) or c).

2. A polynucleotide as claimed in claim 1, wherein the polynucleotide is a DNA, preferably recombinant, which can be replicated in coryneform bacteria.

3. A polynucleotide as claimed in claim 1, wherein the polynucleotide is an RNA.

4. A replicable DNA as claimed in claim 2, containing

i) the nucleotide sequence shown in SEQ ID no. 1, or

ii) at least one sequence which corresponds to the sequence (i) within the degeneracy region of the genetic code, or

iii) at least one sequence which hybridises with the sequence complementary to sequence (i) or (ii), and optionally

iv) functionally neutral sense mutations in (i).

6. A polynucleotide sequence as claimed in claim 2, which codes for a polypeptide containing the amino acid sequence shown in SEQ ID no. 2.

7. A vector containing a polynucleotide sequence as claimed in claim 1.

8. A coryneform bacterium containing a vector as claimed in claim 6.

9. A process for the fermentative preparation of L-amino acids, wherein the following steps are carried out:

a) Fermentation of coryneform bacteria producing the L-amino acid in which at least the gene coding for component H of the phosphotransferase system is enhanced, particularly overexpressed,

b) Enrichment of the L-amino acid in the medium or in the cells of the bacteria and

c) Isolation of the L-amino acid.

10. A process as claimed in claim 9, wherein bacteria are used in which, in addition, further genes of the biosynthesis pathway of the desired L-amino acid are enhanced.

11. A process as claimed in claim 9, wherein bacteria are used in which the metabolic pathways which reduce the formation of the L-amino acid are at least partially excluded.

12. A process as claimed in claim 9, wherein a strain transformed with a plasmid vector is used and the plasmid vector carries the nucleotide sequence of the gene coding for component H of the phosphotransferase system.

13. A process as claimed in one or more of claims 9 to 12, wherein coryneform bacteria which produce L-lysine are used.

14. A process as claimed in claim 10, wherein one or more of the genes selected from the group comprising

the dapA gene coding for dihydrodipicolinate synthase,

the pyc coding for pyruvate carboxylase,

the tpi gene coding for triosephosphate isomerase,

the gap gene coding for glyceraldehyde-3-phosphate dehydrogenase,

the ptsM gene coding for component M of the phosphoenolpyruvate-sugar-phosphotransferase system (ptsM)

the pgk gene coding for 3-phosphoglycerate kinase, and

the lysE gene coding for lysine export,

are simultaneously enhanced, particularly overexpressed or amplified.

15. A process as claimed in claim 11, wherein, for the production of L-lysine, bacteria are fermented in which one of more of the genes selected from the group comprising

the pck gene coding for phosphoenolpyruvate carboxylase,

the pgi gene coding for glucose-6-phosphate isomerase,

the poxB gene coding for pyruvate oxidase

are simultaneously attenuated.

16. A process as claimed in one or more of the preceding claims, wherein microorganisms of the Corynebacterium glutamicum genus are used.

17. The use of polynucleotide sequences as claimed in claim 1 as primers for the preparation of the DNA of genes which code for the ptsH gene product, by the polymerase chain reaction.

18. The use of polynucleotide sequences as claimed in claim 1 as hybridisation probes.

19. DNA originating from coryneform bacteria which encodes proteins components H of the phosphotransferase system, the amino acid sequence of which (SEQ ID NO:2) in position 25 contains any other amino acid except L-alanine.

20. DNA as claimed in claim 19, which encodes a protein component H of the phosphotransferase system, the amino acid sequence of which contains L-threonine in position 25, shown in SEQ ID NO:4.

21. DNA as claimed in claim 19, which contains the nucleobase guanine in position 235, shown in SEQ ID NO:3.

22. Coryneform bacteria which contain DNA as claimed in one of claims 19, 20 or 21.